Examiner's Amendments

## Amendments to the Claims

**IN THE CLAIMS:**

1. (Currently Amended) A process for the preparation of perfluoropolyethers of formula:

T-CFX'-O-$R_f$-CFX-T' (I)

wherein:

T is -F, $C_1$-$C_3$ perfluoroalkyl, -$CH_2OH$, -$CH_2NH_2$, or -CHO;

T'= T with the proviso that when T is F or $C_1$-$C_3$ perfluoroalkyl, T' is -$CH_2OH$, -$CH_2NH_2$, or -CHO;

~~X, X',~~ X and X' are equal to or different from each other~~,~~ and are -F or -$CF_3$;

$R_f$ is selected from:

$-(C_2F_4O)_m(CF_2CF(CF_3)O)_n(CF_2O)_p(CF(CF_3)O)_q-$

wherein the sum n+m+p+q ranges from 2 to 200,

the (p+q)/(m+n+p+q) ratio is lower than or equal to 10:100, ~~preferably comprised between 0.5:100 and 4:100,~~

the n/m ratio ranges from 0.2 to 6~~, preferably from 0.5 to 3~~; m, n, p, and q are equal to or different from each other and when ~~m, n~~ m and n range from 1 to 100~~, and~~ ~~, preferably from 1 to 80,~~ then ~~p, q~~ p and q range from 0 to 80~~, preferably from 0 to 50~~; the units with n, m, p, and q indexes being statistically distributed along the chain;

$-(CF_2CF_2CF_2O)_r-$ wherein r ranges from 2 to 200,

-$(CF(CF_3)CF_2O)_s$- wherein s ranges from 2 to 200,

comprising the following steps:

A) preparation of perfluoropolyethers of formula

T"-CFX'-O-$R_f$-CFX-COF (II)

wherein T" is -COF, -F, or $C_1$-$C_3$ perfluoroalkyl, X, X', and $R_f$ are as above, by reduction of the corresponding perfluoropolyethers containing peroxidic bonds, with gaseous hydrogen in the presence of a catalyst formed by metals of the VIII group supported on metal fluorides, at a temperature from 20°C to 140°C, and at a pressure between 1 and 50 atm;

B) treatment of the formula (II) compounds with inorganic chlorides~~, preferably $CaCl_2$,~~ by heating at a temperature in the range 100°-150°C and obtaining perfluoropolyethers having acylchloride -COCl end groups;

B') treatment of the formula (II) acylfluoride or of the corresponding ester or of the corresponding acylchloride with gaseous ammonia, obtaining the corresponding amide, subsequently dehydrated ~~preferably with $P_2O_5$,~~ at a temperature in the range 150°-200°C, ~~preferably at 170°C, with the obtainment of~~ by and obtaining perfluoropolyethers with nitrile -CN end groups;

C) obtaining the compound (I) by reduction of the perfluoropolyethers with acylchloride end groups, obtained in step B), or with nitrile end groups, obtained in step B'), of formula (IIa):

T'"-CFX'-O-$R_f$-CFX-T"" (IIa) wherein:

T'" = -F, $C_1$-$C_3$ perfluoroalkyl, -CN, or -COCl,

T''''= T''' with the proviso that when T''' is -F or $C_1$-$C_3$ perfluoroalkyl, T'''' is –CN[[,]] or -COCl,

with gaseous hydrogen in the presence of a catalyst constituted by metals of the VIII group selected from Pd, Rh, Ru, supported on solid metal fluorides, at a temperature from 20°C to 150°C~~, preferably from 80°C to 120°C~~ and at a pressure between 1 and 50 atm~~, preferably between 1 and 10 atm,~~ optionally in the presence of inert solvents.

2. (Currently Amended) A process according to claim 1, wherein $R_f$ is selected from ~~the following structures~~ one of the group consisting of:

$-(CF_2CF_2O)_m-(CF_2O)_p-[[,]]$ and

$-(CF_2CF(CF_3)O)_n-(CF_2O)_p-(CF(CF_3)O)_q$.

3. (Currently Amended) A process according to claim 1, wherein the metal fluoride of step C) is selected from the group formed by $CaF_2$, $BaF_2$, $MgF_2$, or $AlF_3$~~, preferably $CaF_2$~~.

4. (Currently Amended) A process according to claim 1, wherein the concentration of the VIII group metal on the metal fluoride of the catalyst of step C) is comprised ~~beteeen~~ between 0.1% and 10% with respect to the total weight of the catalyst~~, preferably between 1% and 2% by weight~~.

5. (New) The process of claim 1, wherein the (p+q)/(m+n+p+q) ratio is between 0.5:100 and 4:100.

6. (New) The process of claim 1, wherein the n/m ratio ranges from 0.5 to 3.

7. (New) The process of claim 1, wherein the m and n range from 1 to 80.

8. (New) The process of claim 1, wherein the p and q range from 0 to 50.

9. (New) The process of claim 1, wherein the inorganic chlorides are $CaCl_2$.

10. (New) The process of claim 1, wherein the amide is dehydrated with $P_2O_5$.

11. (New) The process of claim 1, wherein the termperature of obtaining the compound (I) by reduction of the perfluoropolyethers with acylchloride end groups, obtained in step B), or with nitrile end groups, obtained in step B'), of formula (IIa) is from 80°C to 120°C.

12. (New) The process of claim 1, wherein the pressure of obtaining the compound (I) by reduction of the perfluoropolyethers with acylchloride end groups, obtained in step B), or with nitrile end groups, obtained in step B'), of formula (IIa) is between 1 and 10 atm.

13. (New) The process of claim 3, wherein the metal fluoride is $CaF_2$.

14. (New) The process of claim 4, wherein the concentration of the VIII group metal on the metal fluoride of the catalyst of step C) is comprised between 1% and 2% with respect to the total weight of the catalyst.